

In The Claims

Claim Amendments

1. (Cancelled)
2. (Cancelled)
3. (Cancelled)
4. (Original) A stereolithographic shaping apparatus used for manufacturing a shaped article on a shaping table, the stereolithographic shaping apparatus comprising in combination:
 - a table supporting unit for supporting a shaping table that supports a shaped article, so as to be able to control a posture position of the shaping table in an optional three-dimensional direction;
 - a coating unit section that is set with the table supporting unit, for controlling a posture position of the shaping table, and blowing a liquid optically-curable resin onto a shaped article formed on the shaping table, thereby to coat the optically-curable resin onto the surface of the shaped article; and
 - a curved-surface laminating unit section that is set with a table supporting unit that supports a shaped article coated with the optically-curable resin on the surface, for controlling a posture position of the shaping table, irradiating light onto the optically-curable resin that has been coated on the surface of the shaped article, and curing a required portion of the optically-curable resin, thereby forming optically-shaped resin layers.
5. (Original) The stereolithographic shaping apparatus according to claim 4, further comprising a cleaning unit section that is set with the table supporting unit, for controlling a posture position of the shaping table, and cleaning an uncured optically-curable resin that has been coated on the surface of the shaped article.

6. (Original) The stereolithographic shaping apparatus according to claim 4 or 5, further comprising a flat-surface laminating unit section that is set with the table supporting unit, for controlling a posture position of the shaping table, coating a liquid optically-curable resin flat on the surface of a shaped article formed on the shaping table, irradiating light onto the optically-curable resin, and curing a required portion of the optically-curable resin, thereby forming optically-shaped resin layers.

7. (Original) The stereolithographic shaping apparatus according to claim 4 or 5, further comprising a conveying unit section for conveying the table supporting unit between adjacent unit sections, between unit sections such as the coating unit section and the curved-surface laminating unit section or the like.

8. (Original) The stereolithographic shaping apparatus according to claim 4, wherein the coating unit section includes:

a set frame for supporting the table supporting unit; a rotation table for supporting the set frame, and rotating the table supporting unit at an optional position within a flat surface; an elevator table for supporting the rotation table, and moving, up and down, the table supporting unit to an optional position; and a nozzle for blowing the optically-curable resin onto the shaped article.

9. (Original) The stereolithographic shaping apparatus according to claim 4, wherein the curved-surface laminating unit section includes:

a set frame for supporting the table supporting unit; a rotation table for supporting the set frame, and rotating the table supporting unit at an optional position within a flat surface; an elevator table for supporting the rotation table, and bringing up and down the table supporting unit to an optional position; and a light irradiating section for irradiating light onto the optically-curable resin that has been coated on the surface of the shaped article.

10. (Original) The stereolithographic shaping apparatus according to claim 5, wherein the cleaning unit section includes:

a set frame, provided to be able to move up and down, for supporting the table supporting unit; a cleaning solution spreading section for spraying a cleaning solution toward a shaped article supported by the table supporting unit; and a tank for storing the cleaning solution after cleaning.

11. (Original) The stereolithographic shaping apparatus according to claim 4, wherein the table supporting unit includes:

a base supporting frame; a movable frame that is axially supported by the supporting frame in one pair of opposite frame sections; and a shaping table that is rotatably supported by the other pair of opposite frame sections of the movable frame.

12. (Original) The stereolithographic shaping apparatus according to claim 11, wherein the shaping table is detachably supported by the movable frame.

13. (Original) The stereolithographic shaping apparatus according to claim 4, wherein the optically-curable resin is a resin that can be cured with laser beams, and a laser light source is provided as a light source for curing the optically-curable resin.

14. (Original) The stereolithographic shaping apparatus according to claim 4, wherein the shaped article has built-in an insert article having a three-dimensional structure.